REMARKS

Claims 1, 3-18 and 20-25 are now pending in the application. Claims 2 and 19 have been cancelled without prejudice. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

INTERVIEW SUMMARY

The undersigned wishes to express his appreciation to the Examiner for the courtesy of the telephone interview on January 19, 2010. The claim amendments were discussed relative to the cited references, but no definite agreement was reached.

CLAIM OBJECTIONS

Claims 4, 7, 8, 15 and 16 stand objected to for certain informalities. Very minor wording changes have been made to these claims to remove any possible ambiguity as to the limitations being used therein. Reconsideration and withdrawal of this objection is therefore respectfully requested.

REJECTION UNDER 35 U.S.C. § 102

Claim 1 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Hutchinson (U.S. Pat. No. 6,745,028). This rejection is respectfully traversed.

Initially it will be noted that independent claims 1, 12 and 18 have been amended to more positively recite that the boundary coordinates of a coverage region or cell are defined by **_longitude, latitude and altitude_** information. For the Examiner's convenience, independent claim 1 is set forth below in full as follows:

1.   (Currently Amended) A method for determining when a moving, <u>airborne</u> mobile platform will enter or exit at least one satellite coverage region, said method comprising:

determining a plurality of boundary coordinates that define a satellite coverage region perimeter, <u>the boundary coordinates taking into consideration latitude, longitude and altitude to define a three dimensional spatial volume defined by the satellite coverage region</u>;

monitoring a position of the mobile platform <u>and an altitude of the mobile platform</u> as the mobile platform moves along a travel path; and

determining the proximity of the mobile platform to the satellite coverage region perimeter, <u>taking into account a current latitude, longitude and altitude of the mobile platform</u>.

Independent claim 1, as presently amended, is clearly not anticipated or rendered obvious by Hutchinson. Hutchinson relates to a system and method in which a mobile station in a mobile telephone system is monitored to determine when it will move from one coverage cell to a different coverage cell. It is clear that it is a ground based mobile station that is being discussed in Hutchinson. There is no discussion or suggestion in Hutchinson of defining a satellite coverage region perimeter that takes into account each of **longitude, latitude, and an altitude**, so that a **three dimensional spatial volume** is defined by the boundary coordinates. It is clear from the discussion in Hutchinson that the mobile cell is just intended to traverse *over the surface* of the Earth, such as would occur with cell phone users travelling in a car or other land vehicle (note discussion in column 2, lines 27-33). This would not provide the needed three-dimensional spatial boundary information to an airborne mobile platform to enable it to determine when the mobile platform would be about to leave a predetermined coverage

area, as the latitude and longitude values of the coverage area would vary depending on the altitude of the aircraft at any given time.

For example, at a cruise altitude (typically around 35,000 feet), the latitude and longitude boundary information for a given region covered by an orbiting satellite would produce a smaller coverage "footprint" than the coverage region produced if the airborne mobile platform was travelling at an altitude of 15,000 ft. As the Examiner will appreciate, this is due to the conical nature of the spatial volume that would be irradiated by a satellite transmission directed toward the Earth's surface. Hutchinson simply does not address this issue. For at least these reasons, reconsideration and withdrawal of this rejection is most respectfully requested.

REJECTION UNDER 35 U.S.C. § 103

Claims 2, 3, 5-8, 12, 14-16, 18, 19, 21 and 22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hutchinson in view of Parkman (U.S. Pat. Pub. No. 2002/0168971), assigned to The Boeing Company. In view of the amendments made to independent claim 1, 12 and 18, it is believed that this rejection has been rendered moot. This rejection is respectfully traversed.

Claims 4, 13 and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hutchinson as modified by Parkman as applied to claims 1, 12 and 18, and further in view of Satapathy (U.S. Pat. No. 7,072,641). Again, in view of the amendments to independent claims 1, 12 and 18, it is believed that this rejection has been rendered moot. For the record, however, it will be noted that Satapathy also does not disclose or suggest defining boundary coordinates of one or more coverage regions

by using *latitude, longitude and altitude information* to define a *three dimensional spatial volume for the region*, and also considering the *altitude at which a mobile platform is travelling* when determining when the mobile platform will be leaving a coverage region. Accordingly, reconsideration and withdrawal of this rejection is most respectfully traversed.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: *Jan 25 2010*

By: *[signature]*
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